Ecological Niche Modeling of *Cryptococcus gattii* in British Columbia, Canada

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Supplemental Material

Table S1. Summary of environmental data layers used for *Cryptococcus gattii* ecological niche modeling.

Dataset	**Spatial Resolution**	**Year of Production**	**Source**	**URL**
GTOPO30 Digital Elevation Model	30 arc seconds	1996	United States Geological Survey	http://edc.usgs.gov/products/elevation/gtopo30/gtopo30.html
Biogeoclimatic Ecosystem Classification v6.0	10-250 m	2006	BC Ministry of Forests and Range	http://www.for.gov.bc.ca/hre/becweb/resources/maps/gis_products.html
Temperature 1970-2000 Normals	30 arc seconds	2006	Environment Canada and National Oceanic and Atmospheric Administration	http://www.climate.weatheroffice.ec.gc.ca/climate_normals/index_e.html http://www5.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl
Precipitation 1970-2000 Normals	2.5 arc minutes	2006	University of Oregon	http://www.prism.oregonstate.edu/
Soil Landscapes of Canada v2.2	500 m	1996	Agriculture and Agri-Food Canada	http://sis.agr.gc.ca/cansis/nsdb/slc/v2.2/intro.html

Table S2. Summary of environmental data layer jackknifing for *Cryptococcus gattii* ecological niche modeling based on the distribution of human cases. Training and testing accuracy are expressed as percentages (%).

Environmental Layer	**Commission Errors**	**Omission Errors**	**Training Accuracy**	**Testing Accuracy**	**P-value**
Elevation	4.5	0.4	97.8	97.6	<0.001
Aspect Direction	27.5	72.1	43.2	42.5	0.052
Slope	35.9	9.9	73.6	73.3	<0.001
Biogeoclimatic Zone	2.4	3.6	97.4	96.8	<0.001
January Average Temp.	4.1	0.6	98.0	97.6	<0.001
January Maximum Temp.	4.0	0.6	98.0	97.7	<0.001
January Minimum Temp.	4.8	0.4	97.5	97.4	<0.001
July Average Temp.	13.2	12.6	88.1	86.6	<0.001
July Maximum Temp.	25.5	27.5	68.7	66.9	<0.001
July Minimum Temp.	6.9	4.5	94.8	94.2	<0.001
Annual Total Precipitation	26.3	15.2	78.0	75.8	<0.001
January Total Precipitation	23.7	4.0	85.7	85.1	<0.001
July Total Precipitation	6.2	5.8	91.8	91.8	<0.001
Soil Drainage	14.0	61.4	57.4	56.6	<0.001
Soil Development	21.3	44.5	78.0	78.2	<0.001

Table S3. Summary of environmental data layer jackknifing for *Cryptococcus gattii* ecological niche modeling based on the distribution of animal cases. Training and testing accuracy are expressed as percentages (%).

Environmental Layer	**Commission Errors**	**Omission Errors**	**Training Accuracy**	**Testing Accuracy**	**P-value**
Elevation	4.6	1.1	97.6	97.0	<0.001
Aspect Direction	12.7	95.9	35.1	33.8	0.086
Slope	36.7	14.8	71.3	71.4	<0.001
Biogeoclimatic Zone	1.4	1.3	98.7	98.8	<0.001
January Average Temp.	4.0	0.8	98.0	97.5	<0.001
January Maximum Temp.	3.8	1.3	98.0	97.4	<0.001
January Minimum Temp.	4.5	0.3	97.7	97.5	<0.001
July Average Temp.	15.5	0.2	92.3	92.1	<0.001
July Maximum Temp.	29.0	19.7	72.3	71.6	<0.001
July Minimum Temp.	6.0	3.4	95.9	95.2	<0.001
Annual Total Precipitation	19.7	22.1	76.3	74.1	<0.001
January Total Precipitation	19.1	5.8	88.0	86.7	<0.001
July Total Precipitation	3.3	3.3	96.5	96.0	<0.001
Soil Drainage	10.5	84.2	51.9	51.7	<0.001
Soil Development	19.9	36.7	80.8	81.1	<0.001

Table S4. Summary of environmental data layer jackknifing for *Cryptococcus gattii* ecological niche modeling based on the distribution of positive environmental sampling locations from permanently established sites. Training and testing accuracy are expressed as percentages (%).

Environmental Layer	**Commission Errors**	**Omission Errors**	**Training Accuracy**	**Testing Accuracy**	**P-value**
Elevation	4.6	0.3	97.7	97.3	<0.001
Aspect Direction	24.1	61.1	51.5	51.2	0.002
Slope	37.7	8.6	74.8	74.5	<0.001
Biogeoclimatic Zone	1.4	0.0	99.3	99.3	<0.001
January Average Temp.	4.3	0.0	97.8	97.7	<0.001
January Maximum Temp.	4.2	0.1	97.9	97.7	<0.001
January Minimum Temp.	4.8	0.2	97.6	97.4	<0.001
July Average Temp.	10.1	6.7	87.6	87.9	<0.001
July Maximum Temp.	15.9	12.0	81.2	81.0	<0.001
July Minimum Temp.	8.2	1.7	94.0	94.0	<0.001
Annual Total Precipitation	31.0	5.0	79.4	78.8	<0.001
January Total Precipitation	27.4	6.9	83.5	83.3	<0.001
July Total Precipitation	7.6	5.1	91.3	90.7	<0.001
Soil Drainage	13.0	86.9	44.9	42.8	0.007
Soil Development	22.2	48.0	74.9	76.1	<0.001